

## **Remarks/Arguments**

### **I. Status of the Claims**

Claims 1-10, 12-50, 72-75, 84 and 86-90 are pending.

Claim 3 is objected to as depending from a rejected claim, but has otherwise been indicated as allowable. In order to expedite prosecution of the case, claim 3 has been amended to be in independent form, including all of the limitations of claim 1, from which it depends.

Claims 14, 15, 22 and 28 are currently amended to place these claims in better form (proper dependency)

Claims 1, 2, 4-10, 12-50, 72-75, 84 and 86-90 stand rejected.

### **II. Rejection under 35 U.S.C. § 103(a).**

Claims 1, 2, 4-10, 12-50, 72-75, 84 and 86-90 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPS Annual Meeting Contributed Papers Abstracts (AAPS), in view of Black, EP 0 863 134 (Black), or Plachetka, U.S. 6,586,458, or Block et al., U.S. 6,440,967.

Furthermore, claims 1, 2, 4-10, 12-50, 72-75, 84 and 86-90 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPS in view of Black and Zhang et al., U.S. 5,543,099.

### **The Standard for Obviousness**

35 U.S.C. § 103(a) states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

MPEP 2141 describes the standard to be used to assess obviousness:

Office policy has consistently been to follow Graham v.

John Deere Co. in the consideration and determination of obviousness under 35 U.S.C. 103. As quoted above, the four factual inquiries enunciated therein as a background for determining obviousness are briefly as follows:

- (A) Determining of the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations.

MPEP 2141 (III) states:

III. CONTENT OF THE PRIOR ART IS DETERMINED AT THE TIME THE INVENTION WAS MADE TO AVOID HINDSIGHT

Requirement for "at the time the invention was made" is to avoid impermissible hindsight...

"It is difficult but necessary that the decisionmaker forget what he or she has been taught . . . about the claimed invention and cast the mind back to the time the invention was made (often as here many years), to occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted wisdom in the art." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

Applying the above standard, it is respectfully submitted that a *prima facie* case for obviousness has not been made.

(A) Determining of the scope and contents of the prior art, and (B) Ascertaining the differences between the prior art and the claims in issue

Applicants' own specification states at the section bridging page 2, lines 21-33 to page 3, lines 1-8:

The formulation of celecoxib for effective oral administration to a subject has hitherto been complicated by the unique physical and chemical properties of the compound, particularly its low solubility and factors associated with its crystal

structure, including cohesiveness, low bulk density and low compressibility. Celecoxib is unusually insoluble in aqueous media. Unformulated celecoxib is not readily dissolved and dispersed for rapid absorption in the gastrointestinal tract when administered orally, for example in capsule form. In addition, unformulated celecoxib, which has a crystal morphology that tends to form long cohesive needles, typically fuses into a monolithic mass upon compression in a tableting die. Even when blended with other substances, the celecoxib crystals tend to separate from the other substances and agglomerate together during mixing of the composition resulting in a non-uniformly blended composition containing undesirably large aggregates of celecoxib. Therefore, it is difficult to prepare a pharmaceutical composition containing celecoxib that has the desired blend uniformity. Further, handling problems are encountered during the preparation of pharmaceutical compositions comprising celecoxib. For example, the low bulk density of celecoxib makes it difficult to process the small quantities required during formulation of the pharmaceutical compositions. Accordingly, a need exists for solutions to numerous problems associated with preparation of suitable pharmaceutical compositions and dosage forms comprising celecoxib, particularly orally deliverable dose units.

Applicants' representative is not aware of any reference prior to this application that points out these issues. Therefore, one of ordinary skill in the art, at the time this application was filed, would not be informed of any particular formulation issues.

The Examiner states: "AAPS teaches a celecoxib (COX-2 inhibitor) formulation that exhibits..." In fact, no formulation at all is taught by AAPS. The only mention at all of the administration of active ingredient is the statement: "Subjects received a single oral 300 mg dose of [ $^{14}\text{C}$ ]-SC58635 (100 $\mu\text{Ci}$ ) as a fine suspension followed by 300 mg of SC-58635 as a capsule..."

It is incumbent upon the Examiner to specifically point out why a reference is believed to render a claim obvious. Applicants request that the Examiner point out specifically where in AAPS the alleged formulation is taught.

The Black reference does not cure this deficiency. Black teaches a different COX-2 inhibitor, and does not mention any of the above issues with formulation. Likewise, Plachetka and Block do not mention the particular formulation issues with Celebrex disclosed in the present application.

Zhang does not teach or suggest the  $D_{90}$  limitation of Claim 1, and claims depending thereon. Zhang states that micronization may impart certain desirable characteristics to active ingredients. However, applicants' representative is not aware of any reference that teaches that particle size of less than  $D_{90}$  of 200  $\mu\text{m}$  is synonymous

with micronization. In *Abbott Laboratories v. Novopharm*, 66 USPQ 2d 1200 (323 F. 3d 1324) the Court of Appeals for the Federal Circuit approved of the District Court's definition of "micronized." This definition was "to reduce to a fine powder; to reduce to particles a micron in diameter." *Abbott Laboratories v. Novopharm*, U.S. Dist Lexis 4659, 17 [citing Dorland's Illustrated Medical Dictionary 1112 (29<sup>th</sup> ed. 2000)].

In any event, it is believed that micronization requires particle sizes of much less than  $D_{90}$  of 200 $\mu$ m. Therefore, the Zhang reference does not teach or suggest the specific limitation of Claim 1 or claims depending thereon. Further, without the teachings of applicants specification, one of ordinary skill in the art would not be lead to try any particular formulation or obtain any particular particle size. Therefore, the differences between the asserted references and the claims at issue are apparent.

(C) Resolving the level of ordinary skill in the arrdinary skill in the art

The level of skill in the art would be that of a scientist charged with the task of creating a dosage form of Celecoxib. Without the guidance afforded by the present specification, the skilled artisan would be forced to attempt trial and error to first determine the issues presented by the present application, and identify any solutions to the issues. Applicants propose that it is not obvious to select a particle size of less than  $D_{90}$  of 200  $\mu$ m without invention. The Examiner has not directly challenged this proposition, but rather has used the applicants own specification as a blueprint to piece together art after the fact, in hindsight. Federal courts have consistently held that "[i]t is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q. 2d 1780, 1784 (Fed. Cir. 1992)(citing *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q. 2d 1596, 1600(Fed. Cir. 1988).

Thus, it is respectfully submitted that a case of *prima facie* obviousness cannot be established. The prior art relied upon by the examiner cannot be properly modified or combined as neither reference contains any suggestion or incentive that would have motivated one skilled in the art to modify the reference or to combine the references. Furthermore, the "mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 773 F. 2d 900 (Fed. Cir. 1984).

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Therefore, applicants request that the present rejection under 35 U.S.C. § 103(a) be withdrawn.

### **III. Conclusion**

It is believed that the present amendments bring claims 1-4 and 15-16 into allowable form, and applicants request allowance and issuance of the case.

If the Examiner believes a telephonic interview with Applicant's representative would aid in the prosecution of this application, the Examiner is cordially invited to contact Applicant's representative at the below listed number.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Philip B. Polster II", with a stylized flourish at the end.

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